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PREPARATIONS FOR THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT ON THE BASIS OF GENERAL ASSEMBLY RESOLUTION 44/228 AND TAKING INTO ACCOUNT OTHER RELEVANT GENERAL ASSEMBLY RESOLUTIONS: CROSS-SECTORAL ISSUES

Integration of environment and development in decision-making

(Section I, chapter 7, of Agenda 21)

Text submitted by the Chairman on the basis of negotiations held on document A/CONF.151/PC/100/Add.8

INTRODUCTION

1. The present chapter consists of six programmes:

(a) Integrating environment and development at the policy, planning and management levels;

(b) Providing an effective legal and regulatory framework;

(c) Making effective use of economic instruments and market and other incentives;

(d) Establishing systems for environmental accounting;

[(e) Full cost environmental accounting;]

[(f) Global corporate environmental management.]

PROGRAMME AREAS

A. Integrating environment and development at the policy, planning and management level

Basis for action

2. Prevailing systems for decision-making in many countries tend to separate economic, social and environmental factors - at the policy, planning and management levels. This influences the actions of all groups in society, including Governments, industry and individuals, and has important implications for the efficiency and sustainability of development. An adjustment or even a fundamental reshaping of decision-making, in light of country-specific conditions, may be necessary if environment and development is to be put at the centre of economic and political decision-making - in effect achieving a full integration of these factors. In recent years, some Governments have also begun to make significant changes in the institutional structures of government in order to enable more systematic consideration of the environment when decisions are made on economic, social, fiscal, energy, agricultural, transportation, trade, and other policies, as well as the implications of policies in these areas for the environment. New forms of dialogue are also being developed for achieving better integration among national and local government, industry, science, environmental groups and the public in the process of developing effective approaches to environment and development. The responsibility for bringing about changes lies with Governments in partnership with the private sector and local authorities, and in collaboration with national, regional and international organizations including in particular UNEP, UNDP and the World Bank. Exchange of experience between countries can also be significant. [National plans, goals and objectives, national rules and regulations and law; and the specific situation in which different countries are placed are the overall framework in which such integration takes place. In this context it must be borne in mind the environmental standards may pose severe economic and social costs if they are uniformly applied in developing countries.

Objectives

3. The overall objective is to improve or restructure the decision-making process so that consideration of socio-economic and environmental issues is fully integrated and a broader range of public participation assured. Recognizing that countries will develop their own priorities in accordance with their prevailing conditions, needs, national plans, policies and programmes, the following objectives are proposed:

(a) To conduct a national review of economic, sectoral and environmental policies, strategies and plans to ensure the progressive integration of environmental and developmental issues;

(b) To strengthen institutional structures to allow the full integration of environmental and developmental issues, at all levels of decision-making;

(c) To develop or improve mechanisms to facilitate the involvement of concerned individuals, groups and organizations in decision-making at all levels;

(d) To establish domestically determined procedures to integrate environment and development issues in decision-making.

Activities

(a) Improve decision-making processes

4. The primary need is to integrate environmental and developmental decision-making processes. To do this, Governments should conduct a national review, and, where appropriate, improve the processes of decision-making so as to achieve the progressive integration of economic, social and environmental issues in the pursuit of development that is economically efficient, socially equitable and responsible and environmentally sound. Countries will develop their own priorities in accordance with their national plans, policies and programmes for the following activities:

(a) Ensuring the integration of economic, social and environmental considerations in decision-making at all levels and in all ministries;

(b) Adopting a domestically formulated policy framework that reflects a long-term perspective and cross-sectoral approach as the basis for decisions, taking account of the linkages between and within the various political, economic, social and environmental issues involved in the development process;

(c) Establishing domestically determined ways and means to ensure the coherence of sectoral, economic, social, and environmental policies, plans and policy instruments, including fiscal measures and the budget; these mechanisms should apply at various levels and bring together those interested in the development process;

(d) Monitoring and evaluating the development process systematically, conducting regular reviews of the state of human resources development, economic and social conditions and trends, the state of the environment and natural resources; this could be complemented by annual environment and development reviews, with the view to assessing sustainable development achievements by the various sectors and departments of government;

(e) Ensuring transparency of, and accountability for, the environmental implications of economic and sectoral policies;

(f) Ensuring access by the public to relevant information, facilitating the reception of public views and allowing for effective participation.

(b) Improve planning and management systems

5. To support a more integrated approach to decision-making, the data systems and analytical methods used to support such decision-making processes may need to be improved. Governments, in collaboration, where appropriate, with national and international organizations, should review the status of the planning and management system and, where necessary, modify and strengthen procedures so as to facilitate the integrated consideration of social, economic and environmental issues. Countries will develop their own priorities in accordance with their national plans, policies and programmes for the following activities:

(a) Improving the use of data and information at all stages of planning and management, making systematic and simultaneous use of social, economic, developmental, ecological and environmental data; analysis should stress interactions and synergisms; a broad range of analytical methods should be encouraged so as to provide various points of view;

(b) Adopting comprehensive analytical procedures for prior and simultaneous assessment of the impacts of decisions, including the impacts within and among the economic, social and environmental spheres; these procedures should extend beyond the project level to policies and programmes; analysis should also include assessment of costs, benefits and risks;

(c) Adopting flexible and integrative planning approaches that allow the consideration of multiple goals and enable adjustment of changing needs; integrative area approaches at the ecosystem or watershed level can assist in this approach;

(d) Adopting integrated management systems, particularly for the management of natural resources. Traditional or indigenous methods should be studied and considered wherever they have proved effective; women's traditional roles should not be marginalized as a result of the introduction of new management systems;

(e) Adopting integrated approaches to sustainable development at a regional level, including transboundary areas, subject to the requirements of particular circumstances and needs;

(f) Using policy instruments (legal/regulatory and economic) as a tool for planning and management, seeking incorporation of efficiency criteria in decisions; instruments should be regularly reviewed and adapted to ensure that they continue to be effective;

(g) Delegating planning and management responsibilities to the lowest level of public authority consistent with effective action; in particular the advantages of effective and equitable opportunities for participation by women should be discussed;

(h) Establishing procedures for involving local communities in contingency planning for environmental and industrial accidents, and maintaining an open exchange of information on local hazards.

(c) Data and information

6. Countries could develop systems for monitoring and evaluation of progress towards achieving sustainable development by adopting indicators that measure changes across economic, social and environmental dimensions.

(d) Adopt a national strategy for sustainable development

7. Governments, in cooperation, where appropriate, with international organizations, should adopt a national strategy for sustainable development based on, inter alia, the implementation of decisions taken at the Conference, particularly in respect of Agenda 21. This strategy should build upon and harmonize the various sectoral economic, social and environmental policies and plans that are operating in the country. The experience gained through existing planning exercises such as national reports for the Conference, national conservation strategies and environment action plans should be fully used and incorporated into a country-driven sustainable development strategy. Its goals should be to ensure socially responsible economic development while protecting the resource base and the environment for the benefit of future generations. It should be developed through the widest possible participation. It should be based on a thorough assessment of the current situation and initiatives.

Means of implementation

(a) Financing and cost evaluation

[8. To assist developing countries, it is suggested that the requisite technical and technological cooperation funding from international sources should be made available to developing countries at an annual cost of about US$ 50 million.]

(b) Research environment and development interactions

9. Governments, in collaboration with the national and international scientific community and in cooperation with international organizations, as appropriate, should intensify efforts to clarify the interactions between and within social, economic and environmental considerations. Research should be undertaken with the explicit objective of assisting policy decisions and providing recommendations on improving management practices.

(c) Enhance education and training

10. Countries, in cooperation, where appropriate, with national, regional or international organizations, should ensure that essential human resources exist, or be developed, to undertake the integration of environment and development at various stages of the decision-making and implementation process. To do this, they should improve education and technical training, particularly for women and girls, by including interdisciplinary approaches, as appropriate, in technical, vocational and university and other curricula. They should also undertake systematic training of government personnel, planners and managers on a regular basis, giving priority to the requisite integrative approaches and planning and management techniques that are suited to country-specific conditions.

(d) Promote public awareness

11. Countries, in cooperation with national institutions and groups, the media and the international community, should promote awareness in the public at large, as well as in specialized circles, of the importance of considering environment and development in an integrated manner, and should establish mechanisms for facilitating a direct exchange of information and views with the public. Priority should be given to highlighting the responsibilities and potential contributions of different social groups.

(e) Strengthen national institutional capacity

12. Governments, in cooperation, where appropriate, with international organizations, should strengthen national institutional capability and capacity to integrate social, economic, developmental and environmental issues at all levels of development decision-making and implementation. Attention should be given to moving away from narrow sectoral approaches, progressing towards full cross-sectoral coordination and cooperation.

B. Providing an effective legal and regulatory framework

Basis for action

13. Laws and regulations suited to country-specific conditions are among the most important instruments for transforming environment and development policies into action - not only through "command and control" methods, but also as a normative framework for economic planning and market instruments. Yet although the volume of legal texts in this field is steadily increasing, much of the law-making in many countries seems to be ad hoc and piecemeal, or has not been endowed with the necessary institutional machinery and authority for enforcement and timely adjustment.

14. While there is continuous need for law improvement in all countries, many developing countries have been affected by shortcomings of laws and

regulations. To effectively integrate environment and development in the policies and practices of each country, it is essential to develop and implement integrated, enforceable, effective laws and regulations that are based upon sound social, ecological, economic and scientific principles. It is equally critical to develop workable programmes to review and enforce compliance with the laws, regulations and standards that are adopted. Technical support may be needed for many countries to accomplish these goals. Technical cooperation requirements in this field include legal information, advisory services and specialized training and institutional capacity-building.

15. The enactment and enforcement of laws and regulations (at the regional, national, state/provincial or local/municipal level) are also essential for the implementation of most international agreements in the field of environment and development, as illustrated by the frequent treaty obligation to report on legislative measures. The survey of existing agreements undertaken in the context of conference preparations has indicated problems of compliance in this respect, and the need for improved national implementation and, where appropriate, related technical assistance. In developing their national priorities, countries should take account of their international obligations.

Objectives

16. The overall objective is to promote, in light of country-specific conditions, the integration of environment and development policies through appropriate legal and regulatory policies, instruments and enforcement mechanisms at the national, state, provincial, and local level. Recognizing that countries will develop their own priorities in accordance with their needs and national, and where appropriate, regional plans, policies and programmes, the following objectives are proposed:

(a) To disseminate information on effective legal and regulatory innovations in the field of environment and development, including appropriate instruments and compliance incentives, with a view to encouraging their wider use and adoption at the national, state, provincial, and local level;

(b) To support countries which request it in their national efforts to modernize and strengthen the policy and legal framework of governance for sustainable development, having due regard for local social values and infrastructures;

(c) To encourage the development and implementation of national, state, provincial and local programmes which assess and promote compliance and respond appropriately to non-compliance.

Activities

(a) Make laws and regulations more effective

17. Governments, with the support of competent international organizations, where appropriate, should regularly assess the laws and regulations enacted and the related institutional/administrative machinery established at the national/state and local/municipal level in the field of environment and sustainable development, with a view to rendering them effective in practice. Programmes for this purpose could include the promotion of public awareness, preparation and distribution of guidance material, and specialized training, including workshops, seminars, education programmes, and conferences, for public officials who design, implement, monitor and enforce laws and regulations.

(b) Establish judicial and administrative procedures

18. Governments and legislators, with the support, where appropriate, of competent international organizations, should establish judicial and administrative procedures for legal redress and remedy of actions affecting environment and development that may be unlawful or infringe on rights under the law, and should provide access to individuals, groups and organizations with a recognized legal interest.

(c) Provide legal reference and support services

19. Competent intergovernmental and non-governmental organizations could cooperate to provide Governments and legislators, upon request, with an integrated programme of environment and development law (sustainable development law) services, carefully adapted to the specific requirements of the recipient legal and administrative systems. Such systems could usefully include assistance in the preparation of comprehensive inventories and reviews of national legal systems. Past experience has demonstrated the usefulness of combining specialized legal information services with legal expert advice. Within the United Nations system, closer cooperation between all agencies concerned would avoid duplication of databases and facilitate division of labour. These agencies could examine the possibility and merit of performing reviews of selected national legal systems.

(d) Establish a cooperative training network for sustainable development law

20. Competent international and academic institutions could - within agreed frameworks - cooperate to provide, especially for trainees from developing countries, postgraduate programmes and in-service training facilities in environment and development law. Such training should address both the effective application and the progressive improvement of applicable laws, the related skills of negotiating, drafting and mediation, and the training of trainers. Intergovernmental and non-governmental organizations already active in this field could cooperate with related university programmes to harmonize curriculum planning and to offer an optimal range of options to interested Governments and potential sponsors.

(e) Develop effective national programmes for reviewing and enforcing compliance with national, state, provincial and local laws on environment and development

21. Each country should develop integrated strategies to maximize compliance with its laws and regulations relating to sustainable development, with assistance from international organizations and other countries as appropriate. The strategies could include:

(a) Enforceable, effective laws, regulations and standards that are based on sound economic, social and environmental principles and appropriate risk assessment, incorporating sanctions designed to punish violations, obtain redress, and deter future violations;

(b) Mechanisms for promoting compliance;

(c) Institutional capacity for collecting compliance data, regularly reviewing compliance, detecting violations, establishing enforcement priorities, undertaking effective enforcement, and conducting periodic evaluations of the effectiveness of compliance and enforcement programmes;

(d) Mechanisms for appropriate involvement of individuals and groups in the development and enforcement of laws and regulations on environment and development.

(f) National monitoring of legal follow-up to international instruments

22. Contracting parties to international agreements, in consultation with the appropriate secretariats of relevant international conventions as appropriate, should improve practices and procedures for information on legal and regulatory measures taken. Contracting parties to international agreements could undertake sample surveys of domestic follow-up action subject to agreement by the sovereign States concerned.

Means of implementation

(a) Financing and cost evaluation

[23. Most of the programme activities could be carried out, with government consent, through organizations and institutions already active or competent in this field, including mechanisms of technical cooperation between developing countries.

[(a) Additional technical cooperation costs for a projected series of 20 country missions per year with the consent of the sovereign States concerned (to prepare comprehensive inventories of national legal systems with regard to sustainable development), and for direct assistance to developing countries in national implementation of international instruments, are estimated at $4 million;]

[(b) Additional support costs to international organizations and institutions (to provide, upon request and under preferential conditions, legal reference, advisory and training services to Governments of developing countries and economies in transition) are estimated at $2 million per year.]

(b) Scientific and technological means

24. The programme relies essentially on a continuation of ongoing work for legal data collection, translation and assessment. Closer cooperation between existing databases may be expected to lead to better division of labour (e.g., in geographical coverage of national legislative gazettes and other reference sources) and to improved standardization and compatibility of data, as appropriate.

(c) Human resources development

25. Participation in training is expected to benefit practitioners from developing countries and to enhance training opportunities for women. Demand for this type of postgraduate and in-service training is known to be high. The seminars, workshops, and conferences on review and enforcement that have been held to date have been very successful and well attended. The purpose of these efforts is to develop resources (both human and institutional) to design and implement effective programmes to continuously review and enforce national and local laws, regulations, and standards on sustainable development.

(d) Strengthen legal and institutional capacity

26. A major part of the programme should be oriented towards improving the legal-institutional capacities of countries to cope with national problems of governance and effective law-making and law-applying in the field of environment and sustainable development. Regional centres of excellence could be designated and supported to build up specialized databases and training facilities for linguistic/cultural groups of legal systems.

C. Making effective use of economic instruments and market and other incentives

Basis for action

27. Environmental law and regulation are important but cannot alone be expected to deal with the problems of environment and development. Prices, markets and governmental fiscal and economic policies also play a complementary role in shaping attitudes and behaviour towards the environment.

28. During the past several years, many Governments, primarily in industrialized countries but also in Central and Eastern Europe and in developing countries, have been making increasing use of economic approaches including those that are market-oriented. Examples include the polluter pays principle and the more recent natural resource user pays concept.

29. Within a supportive international and national economic context and given the necessary legal and regulatory framework economic and market-oriented approaches can in many cases enhance capacity to deal with the issues of environment and development. This would be achieved by providing cost-effective solutions, applying integrated pollution prevention control, promoting technological innovation and influencing environmental behaviour, as well as providing financial resources to meet sustainable development objectives.

30. What is needed is an appropriate effort to explore and make more effective and widespread use of economic and market-oriented approaches within a broad framework of development policies, law and regulation suited to country-specific conditions, as part of a general transition to economic and environmental policies which are supportive and mutually reinforcing.

Objectives

31. Recognizing that countries will develop their own priorities in accordance with their needs and national plans, policies and programmes, the challenge is to achieve significant progress in the years ahead in meeting three fundamental objectives:

(a) To incorporate environmental costs in the decisions of producers and consumers, to reverse the tendency to treat the environment as a "free good" and to pass these costs on to other parts of society, other countries, or to future generations;

(b) To move more fully towards integration of social and environmental costs into economic activities, so that prices will appropriately reflect the relative scarcity and total value of resources and contribute towards the prevention of environmental degradation;

(c) To include wherever appropriate the use of market principles in the framing of economic instruments and policies to pursue sustainable development.

Activities

(a) Improve or reorient governmental policies

32. In the near term, Governments should consider gradually building on experience with economic instruments and market mechanisms by undertaking to reorient their policies, keeping in mind national plans, priorities and objectives, in order to:

(a) Establish effective combinations of economic, regulatory and voluntary (self-regulatory) approaches;

(b) Remove or reduce those subsidies which do not conform with sustainable development objectives;

(c) Reform or recast existing structures of economic and fiscal incentives to meet environment and development objectives;

(d) Establish a policy framework which encourages the creation of new markets in pollution control and environmentally sounder resource management;

(e) Move towards pricing consistent with sustainable development objectives.

33. In particular, Governments should explore how effective use can be made of economic instruments and market mechanisms in the following areas:

(a) Issues related to energy, transportation, agriculture and forestry, water, wastes, health, tourism and tertiary services;

(b) Global and transboundary issues;

(c) The development and introduction of environmentally sound technology and its adaptation, diffusion and transfer to developing countries, [on concessional and preferential terms.]

(b) Take account of the particular circumstances of developing countries and countries with economies in transition

34. A special effort should be made to develop applications of the use of economic instruments and market mechanisms geared to the particular needs of developing countries and countries with economies in transition, with the assistance of regional and international economic and environmental organizations and as appropriate non-governmental research institutes, by:

(a) Providing technical support to these countries on issues relating to the application of economic instruments and market mechanisms;

(b) Encouraging regional seminars and, possibly, the development of regional centres of expertise.

(c) Create an inventory of effective uses of economic instruments and market mechanisms

35. Given the recognition that the use of economic instruments and market mechanisms is relatively recent, exchange of information about different countries' experiences with such approaches should be actively encouraged. In this regard, Governments should encourage the use of existing means of information exchange to look at effective uses of economic instruments.

(d) Increase understanding of the role of economic instruments and market mechanisms

36. Governments should encourage research and analysis on effective uses of economic instruments and incentives with the assistance and support of regional and international economic and environmental organizations, as well as non-governmental research institutes, with a focus on such key issues as:

(a) The role of environmental taxation suited to national conditions;

(b) The implications of economic instruments and incentives for competitiveness and international trade, and potential needs for appropriate future international cooperation and coordination;

(c) The possible social and distributive implications of using various instruments.

(e) Establish a process for focusing on pricing

37. The theoretical advantages of using pricing policies where appropriate need to be better understood, and accompanied by greater understanding of what it means to take significant steps in this direction. Processes should therefore be initiated at both the national and international levels to examine:

(a) The practical implications of moving towards greater reliance on pricing that internalize environmental costs appropriate to help achieve sustainable development objectives;

(b) The implications for resource pricing in the case of resource-exporting countries, including the implications of such pricing policies for developing countries;

(c) The methodologies used in valuing environmental costs.

(f) Enhance understanding of sustainable development economics

38. Increased interest in economic instruments including market mechanisms also requires a concerted effort to improve understanding of sustainable development economics by:

(a) Encouraging institutions of higher learning to review their curricula and strengthen studies in sustainable development economics;

(b) Encouraging regional and international economic organizations and non-governmental research institutes with expertise in this area to provide training sessions and seminars for government officials.

Means of implementation

39. This programme involves adjustments or reorientation of policies on the part of Governments. It also involves international and regional economic and environmental organizations and agencies with expertise in this area.

(a) Financing and cost evaluation

[40. Additional costs associated with implementing these activities would be minimal, in the range of not more than $5 million annually, associated with the creation of a global inventory and regional seminars. Any costs are far outweighed by the potential for additional financial resources arising from increased reliance on economic instruments and market incentives.]

D. Establishing systems for integrated environmental and economic accounting

Basis for action

41. A first step towards the integration of sustainability into economic management is the establishment of better measurement of the crucial role of the [ecosystem balance] and the environment as a source of natural capital and as a sink for by-products generated during the production of man-made capital and other human activities. As sustainable development encompasses social, economic and environmental dimensions, it is also important that national accounting procedures are not restricted to measuring the production of goods and services that are conventionally remunerated. A common framework needs to be developed whereby the contributions made by all sectors and activities of society, that are not included in the conventional national accounts, are included in satellite accounts. A programme to develop national systems of integrated environmental and economic accounting in all countries is proposed.

Objectives

42. The main objective is to expand existing systems of national economic accounts in order to integrate environment and social dimensions in the accounting framework including at least satellite systems of accounts for natural resources in all member States. The resulting systems of integrated environmental and economic accounting (IEEA) to be established in all member States at the earliest date should be seen as a complement to, rather than a substitute for, traditional national accounting practices for the foreseeable future. IEEAs would be designed to play an integral part in the national development decision-making process. National accounting agencies should work in close collaboration with national environmental statistics as well as the geographic and natural resource departments. The definition of economically active could be expanded to include people performing productive but unpaid tasks in all countries. This would enable their contribution to be adequately measured and taken into account in decision-making.

Activities

(a) Strengthen international cooperation

43. The United Nations Statistical Office should:

(a) Make available to all member States the methodologies contained in the SNA Handbook on Integrated Environmental and Economic Accounting;

(b) In collaboration with other relevant United Nations agencies, further develop, test, refine, and then standardize the provisional concepts and methods such as those proposed by the SNA Handbook, keeping member States informed of the status of the work throughout this process;

(c) Coordinate, in close cooperation with other international organizations, the training of national accountants, environmental statisticians and national technical staff in small groups for the establishment, adaptation and development of national IEEAs.

44. The Department of Economic and Social Development of the Secretariat in close collaboration with other relevant United Nations agencies should:

(a) Support, in all member States, the utilization of sustainable development indicators in national economic and social planning and decision-making practices with a view to ensuring that IEEAs are usefully integrated in economic development planning at the national level;

(b) Promote improved environmental and economic and social data collection.

(b) Strengthen national accounting systems

45. At the national level, the programme could be adopted mainly by the agencies dealing with national accounts, in close cooperation with environmental statistics and natural resource departments with a view to assisting national economic analysts and decision makers in charge of national economic planning. National institutions should play a crucial role not only as the depositary of the system but also in its adaptation, establishment and continuous use. Unpaid productive work such as domestic work and child care should be included, where appropriate, in satellite national accounts and economic statistics. Time-use surveys could be a first step in the process of developing these satellite accounts.

(c) Establish an assessment process

46. At the international level, the Statistical Commission should assemble and review experience and advise member States on technical and methodological issues related to the further development and implementation of IEEAs in member States.

(d) Strengthen data and information collection

47. National Governments could consider implementing the necessary enhancement in data collection to set in place national IEEAs with a view to contributing pragmatically to sound economic management. Major efforts should be made to augment the capacity to collect and analyse environmental data and information and to integrate it with economic data, including gender disaggregated data. Efforts should also be made in order to develop physical environmental accounts. International donor agencies should consider financing the development of intersectoral data banks to help ensuring that national planning for sustainable development is based on precise, reliable and effective information and is suited to national conditions.

(e) Strengthen technical cooperation

48. The United Nations Statistical Office, in close collaboration with the relevant United Nations agencies, should strengthen existing mechanisms for technical cooperation among countries. This should also include exchange of experience in the establishment of IEEAs particularly in connection with the valuation of non-marketed natural resources and standardization in data collection.

Means of implementation

(a) Financing and cost evaluation

[49. Financing will have to be increased, particularly for activities connected to environmental data gathering and assessment at both the national and international levels. Based on the experience and estimates by the United Nations Statistical Office, the establishment of IEEAs requires some additional international funding. However, the costs can be significantly higher if countries do not have reasonably developed national statistical systems. Cost estimates assume that national counterparts play an instrumental role in the process and that contributions in terms of human resources and infrastructure are readily available in the country. Approximately US$ 2 million per year in external costs will be needed.]

(b) Strengthen institutions

50. To ensure the application of IEEAs:

(a) National institutions in developing countries could be strengthened to ensure the effective integration of environment and development at the planning and decision-making levels;

(b) The Statistical Office should provide the necessary technical support to member States in close collaboration with the assessment process to be established by the Statistical Commission. [The Statistical Office should provide substantive technical support for establishing IEEAs and the provision of technical cooperation in collaboration with relevant United Nations agencies.]

(c) Enhance use of information technology

51. Guidelines and mechanisms could be developed and agreed for the adaptation and diffusion of information technologies to developing countries. State-of-the-art data management technologies should be adopted for the most efficient and widespread use of IEEAs.

(d) Strengthen national capacity

52. Governments, with the support of the international community, should strengthen national institutional capacity to collect, store, organize, assess and use data in decision-making. Training in all areas related to the establishment of IEEAs, and at all levels, will be required especially in developing countries. This should include technical training of those involved in economic and environmental analysis, data collection, national accounting as well as training decision makers to use such information in a pragmatic and appropriate way.

[E. Full-cost environmental accounting

Basis for action

53. The failure to account for the depletion and degradation of natural resources distorts product costs and prices and leads to unsustainable production and consumption patterns. Current accounting practices report only market transactions and do not record the full cost of natural resource use. No direct costs are assigned to the consumers of common goods, such as air and water. Environmental accounting studies indicate that few corporations have adopted environmental accounting procedures. Internalizing all long-term environmental costs in the accounting and reporting process is a vital operational requirement for sustainable development. Achieving this goal requires the development of new accounting rules and financial statements. There is a need for new valuation methods for quantifying the unrecorded costs of non-sustainable development to be devised.

54. Governments can take supportive steps to ensure that market price signals will reflect full environmental costs. They can adopt the "polluter pays" principle, which requires the polluter to internalize the costs of pollution prevention, adopt other economic incentives, such as tradeable permits, user fees and deposit refund systems, and remove price distortions in existing governmental programmes that cause natural resources to be underpriced.

Objectives

55. The following objectives will require the coordinated efforts of corporations, Governments and international organizations:

(a) Inclusion, within five years, of environmental considerations in corporate accounting and reporting in order to relate an enterprise's environmental activities to its financial position and performance;

(b) Incorporation, within 10 years, of full environmental costs into the production of goods and services in order to send the right price signals to producers and consumers;

(c) Development, within 10 years, of accounting and reporting methods in order to encompass sustainable development considerations in the calculation of financial results.

Activities and means of implementation

56. The managerial tasks for corporations are to:

(a) Provide, within three years, relevant environmental information in their financial statements to shareholders, creditors, employees, governmental authorities, consumers and the public; separate environmental expenditure from other expenditure; measure and separate environmental liabilities arising from compliance with environmental regulations from other liabilities; develop a programme of environmental auditing;

(b) Ensure that compensation is provided to those directly and adversely affected by the environmental harm caused by the enterprise;

(c) Redefine, within five years, asset and liability boundaries in order to include public goods, such as air and water quality and biodiversity, in a manner consistent with sustainable development;

(d) Develop and use prototype accounts that measure resources use and, within 10 years, link resource use to financial statements through appropriate valuation methods;

(e) Utilize the results of sustainable development accounting in order to improve sustainable development management.

57. The managerial tasks for Governments and international organizations are to:

(a) Remove, within five years, price distortions arising from governmental programmes affecting land, water, energy and other natural resources;

(b) Review existing accounting and reporting regulations and develop new ones which require more transparent reporting, within five years;

(c) Develop, within 10 years, methods and rules for accounting for sustainable development, including the "polluter pays" principle.

58. The data and information tasks for governments, international organizations and corporations are to:

(a) Develop, within 10 years, a national natural resource inventory based on corporate use of renewable and non-renewable resources;

(b) Prepare, every five years, sustainable development reports at the corporate level, using new prototype accounts and statements showing income on a sustainable basis and, within 10 years, include in those reports environmental and development items covering the corporation's impact in developing countries, as well as a statement by the Board of Directors on the status of the corporation's transition to a sustainably managed corporation.

59. Tasks in the area of international and regional cooperation and coordination are to:

(a) Review, within five years, investment and trade policies in order to remove distortions in pricing and the barriers that often encourage excessive use and dependence on imports and exports of natural resources;

(b) Harmonize, within five years, accounting rules for financial statements which incorporate environmental considerations;

(c) Develop, within 10 years, common accounting rules for sustainable development.

60. The capacity-building tasks for Governments and international organizations are to:

(a) Support practical research for the development of new prototype statements and methods for valuing all environmental resources;

(b) Encourage the retraining of auditors in environmental accounting and reporting so that they can verify that the financial statements give a true and fair view of the enterprise's activities and reflect the full environmental costs of production.]

[F. Global corporate environmental management

Basis for action

61. Managerial leadership in the adoption of consistently high environmental policies is the key to promoting a global standard of corporate responsibility, even ahead of changes in national and international law. Managerial policies can encourage a corporate culture based upon sustainable development values. In order to institutionalize the corporate-wide environment and development policies, however, supportive corporate programmes and organizational structures are needed. Corporate efforts to integrate environment, health and safety goals into performance appraisals, organizational structure and education and training are the key to linking sustainable development with daily decision-making.

Objectives

62. The following objectives will require the coordinated efforts of corporations, Governments and international organizations:

(a) Development, within five years, of globally applicable corporate policies for the shift towards sustainable development;

(b) Establishment or strengthening, within 10 years, of global corporate environmental management systems and organizational structures in order to supervise and monitor the adjustment to a sustainably managed corporation;

(c) Integration, within 10 years, of corporate environmental concerns into the sustainable development needs of host countries;

(d) Implementation, within 15 years, of the corporate programmes and practices required to support environmental and developmental goals in all operations throughout the world.

Activities

63. The managerial tasks for corporations are to:

(a) Recognize sustainable development as among the highest of corporate priorities; develop, within one year, formal corporate-wide policy statement regarding the firm's commitment to sustainable development; establish, within two years, specific operational policies (e.g., on water, air and soil protection) and, within four years, sector-specific policies (i.e., on agriculture, mining, textiles and electronic production);

(b) Adopt a "cradle-to-grave" product life-cycle management strategy for overseeing the integration of environmental criteria into the firm's complete range of products, processes and services;

(c) Examine the impact of the firm's activities on the global commons and on the environment and development of host countries;

(d) Identify, within three years, the programmes required to support the firm's environment and development policy statement for all operations throughout the world and, within seven years, initiate these programmes.

64. The managerial tasks for Governments and international organizations are to:

(a) Make sustainable development objectives and aims as clear, stable and understandable to corporations as possible; adopt sustainable development criteria and guidelines in government regulatory requirements and incentive programmes; devise regulatory and/or incentive frameworks in order to encourage a "cradle-to-grave" product life-cycle approach;

(b) Implement, within two years, programmes for gathering information on corporate operational policies, programmes and technologies conducive to sustainable development; establish, within seven years, an international database and information exchange network as a means of providing corporations and Governments with information regarding successful corporate policies, programmes and technologies;

(c) Establish an internationally recognized award for the leading sustainably managed corporations.

65. The data and information tasks for corporations are to:

(a) Disseminate, within two years, the general environmental policy statement and corporate-wide operational policies in appropriate languages to all home country plants and affiliates and to joint venture partnerships in host countries and, within four years, disseminate these policies and statements to licensees, customers, suppliers and subcontractors;

(b) Prepare and perform, on a regular basis, environmental audits covering all home and host country operations; measure the performance of affiliates against both international and internal corporate standards.

66. Tasks in the area of international and regional cooperation and coordination are to:

(a) Develop and implement, within three years, a formal liaison programme between transnational corporate affiliates and host Governments for mutual consultation and advice on sustainable development issues; create, within five years, an international advisory body composed of experts from all concerned parties in order to help promote international policies for the health and safety of workers and for the protection and preservation of the environment;

(b) Establish information exchange networks among national, regional, and international research and development institutions; create programmes on sustainable development management in academic institutions;

(c) Implement cooperative programmes for the transfer of environmentally sounder technology between transnational corporations and host country firms and local governments.

Means of implementation

67. The financial and cost evaluation tasks for corporations are to:

(a) Establish corporate policies which encourage voluntary contributions in support of non-governmental organizations undertaking sustainable development projects, particularly in host developing countries;

(b) Give preference to corporate investment in funds and investments which are compatible with sustainable growth; establish sustainability factors as a key criterion in determining lending policies for potential investment candidates;

(c) Forego activities with firms and other entities which do not meet acceptable local, national and international environmental, health and safety standards.

68. The scientific and technological tasks for corporations are to:

(a) Update, every five years, corporate-wide policies, programmes and practices in the light of the most recent technical developments and scientific understandings;

(b) Conduct sustainable development impact assessments for all prospective investments, divestments and large management contracts; conduct, within five years, a periodic assessment of the corporation's impact upon the local economic and social conditions in the host country, in particular in a host developing country;

(c) Encourage research and development units to conduct environmental impact assessment studies for new technologies, products and services both prior to and during the development phase.

69. The human resource development tasks for corporations are to:

(a) Integrate, within five years, environmental and developmental goals into all corporate incentive and compensation programmes;

(b) Structure lines of responsibility so as to reflect the critical role of environment and development in managerial decision-making; designate, within one year, an executive at the headquarters and a senior official at the affiliate level responsible for environmental matters; designate, within two years, a specific officer or committee at the board of directors level responsible for environmental matters; and, within five years, report to the officer or committee on the progress made by the firm in the implementation of the goals of the United Nations Conference on Environment and Development;

(c) Educate, within three years, senior management throughout the world about corporate sustainable development culture, goals and policies;

(d) Sponsor, within two years, training programmes for host country managers and employees on environmental protection, resource management and sustainable development; create scholarships for host country employees at technical, trade union, engineering and management schools in order to build their environmental capabilities.

70. The capacity-building tasks for corporations are to:

(a) Evaluate, within one year, the capacity of affiliates, subcontractors and suppliers to manage their assigned tasks safely; within five years, include in all affiliate, subcontractor and supplier contracts instructions detailing environmental responsibilities;

(b) Engage, within five years, affiliates in decision-making in order to enable them to contribute to the economic and environmental development of the countries in which they operate.

71. The capacity-building tasks for Governments and international organizations are to:

(a) Provide technical assistance to host Governments on sustainable corporate management techniques, fully utilizing local technical knowledge and experience;

(b) Assist small and medium-sized enterprises in developing countries in the education and training of management and employees in sustainable development issues;

(c) Identify, within one year, critical issues regarding the local economic and social conditions that need to be considered by an environmental and development impact assessment and, within five years, devise solutions involving those critical issues.]